

### **REMARKS**

In the Office Action mailed July 27, 2007, the Examiner rejected the pending claims in view of the Sanderson reference (U.S. Patent No. 6,279,906), the Lode reference (U.S. Patent No. 3,828,345), the Top Gear Overdrive reference, the Green reference (U.S. Patent No. 4,764,748), the Matsuyama reference (U.S. Patent No. 6,767,282), the Woolston reference (U.S. Patent No. 6,162,123), the Yasue reference (U.S. Patent No. 6,189,053), Childs reference (U.S. Patent No. 5,623,545), the Lum reference (U.S. Patent Publication No. 2004/0224763), or some combination thereof. By this paper, the Applicant has amended the claims of the application to highlight the subject matter that the Applicant believes is allowable over the art of record. Hence, reconsideration of the above-captioned application in light of the amendments and remarks contained herein is now respectfully requested.

After carefully reviewing the art of record, the Applicant notes that none of the references, either by themselves or in combination with each other, disclose the combination of a system that measures the acceleration of an object at a plurality of intervals, determines the movement of the object at a plurality of intervals and converts this movement data into a first set of signals, and then translates the first set of signals into a second set of signals so as to replace an existing input into a device to thereby control the simulated motion of a simulation of the object. (*See, e.g.*, Claim 1 as amended). Sanderson discloses a system that has a designated set of inputs that come off of a steering wheel which are then provided directly into the game, thereby replacing the original game controller. Sanderson is not measuring acceleration of particular objects; Sanderson is actually measuring position of the steering wheel and various components and is outputting a movement based signal to the game controller. The Applicant does not even believe that Sanderson is actually translating the movement signals from Sanderson into a set of signals having ranges and values in that the game would correspond, as Applicant believes that Sanderson is actually providing the output data in a format that the game would natively understand. Hence, Sanderson is neither doing the conversion process as defined by the Applicant's claims, nor is Sanderson measuring the acceleration of an object.

Similarly, Matsuyama is also not measuring the acceleration of the object, but rather is measuring position to thereby determine the movement of an object. To the extent that Matsuyama is disclosing the use of accelerometers, it only uses the accelerometers to determine

the orientation of the golf club during the swings rather than the actual movement of the golf club or ball. As a consequence, Matsuyama cannot be said to teach or disclose the concept of measuring acceleration data at intervals and then using this interval-based acceleration data to determine the actual movement of the object and then utilizing the movement data that is derived from the acceleration data to develop signals that can be used to substitute for signals of the original game controller used with the game. None of the other references cited by the Examiner performed this combination of measuring acceleration at intervals to determine the movement of the object.

In contrast, the Applicant's invention as disclosed in the application as filed, has accelerometers that measure the movement of the golf club at a plurality of intervals and then uses this acceleration data to determine the actual motion of the golf club. The motion of the golf club is then translated into a series of signals which then have to be correlated with the expected signals of the game controller. In essence, the Applicant is using a very uncontrolled device, a person swinging a golf club in the preferred embodiment, and is developing a set of signals from that by looking at the data at intervals, and is then using the signal indicative of the movement of the golf club as determined from the acceleration to then come up with a corresponding signal that can be fed into the game to control the simulated motion of the golf club in the game. The Applicant's invention allows for the use of a more realistic game simulation device in that the user's actual physical performance in swinging a golf club, which can vary greatly, and this information can then be translated into a signal that will be readily understood by the game controller. In this way, existing computer games or video games can be used with more sophisticated game controllers and provide the user with a more realistic sensation in playing the game. The fact that none of the references cited by the Examiner disclose this concept, indicates that Claim 1 as amended is allowable over the art of record. The Applicant notes that similar amendments have been made to Claims 20, 36, 46 and 56 and that these claims are therefore allowable over the art of record for similar reasons. The Applicant further submits that the remaining claims define additional patentable subject matter and are further allowable due to their respective dependencies on Claims 1, 20, 36, 46 and 56. The Applicant therefore believes that the above-captioned application is in condition for allowance and requests the prompt allowance of the same. Should there be any impediment to the prompt

**Application No.:** 10/741,308  
**Filing Date.:** December 19, 2003

allowance of this application that could be resolved by a telephone conference, the Examiner is respectfully requested to contact the undersigned at the number shown below.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Co-Pending Applications of Assignee

Applicant wishes to draw the Examiner's attention to the following co-pending applications of the present application's assignee.

Serial Number	Title	Filed
10/957,338	INPUT SYSTEM AND METHOD	10/1/04

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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 10/23/07

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